Gradient

TEAM INTELLIGENCE

Objective and motivations

Existing Diaries

- Hard to select and express various emotions
- Few choices of emotions
- Tired to select all the emotions

Gradient

- User can add new emotions
- User can choose various emotions for a day
- GPT helps to select emotions

Project Progress

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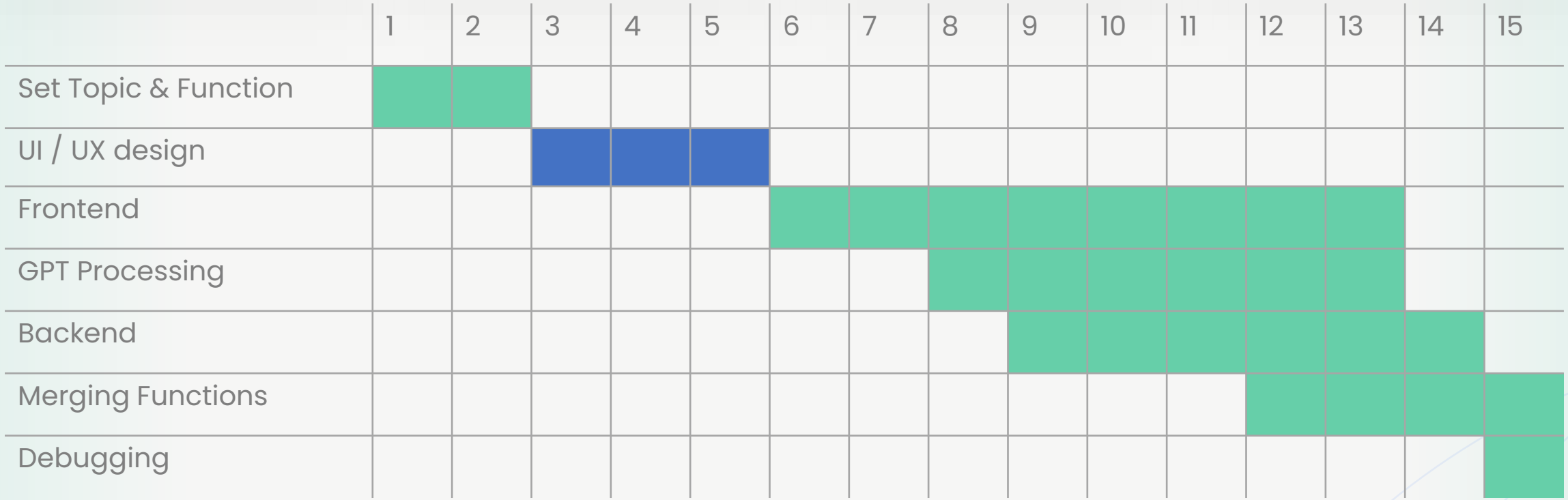
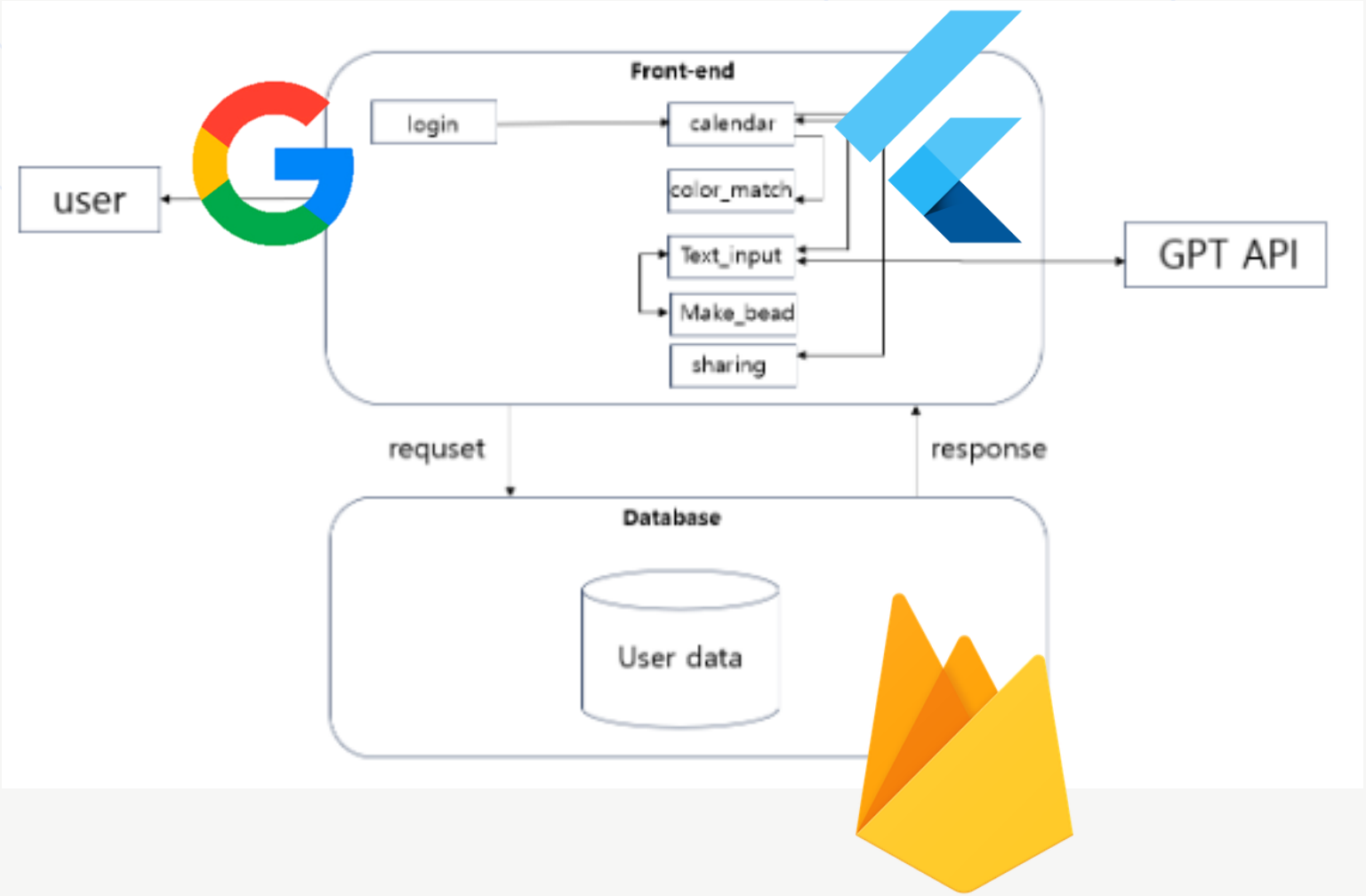
Team Leader	Frontend	Backend	Frontend
Frontend & Backend	LaTeX	GPT Processing	Presentation

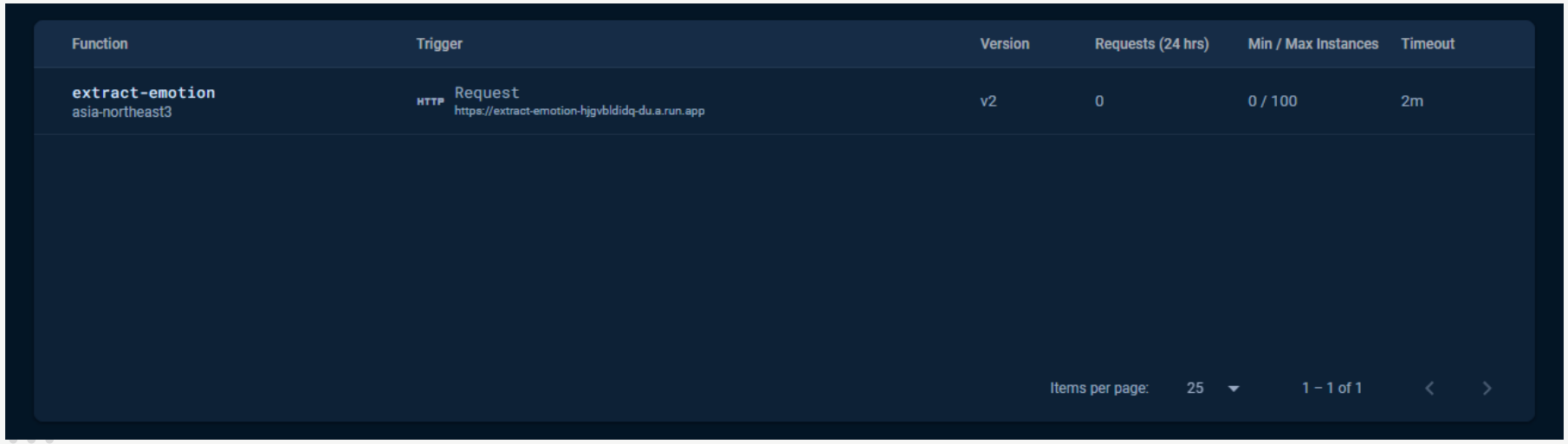


Overall Architecture

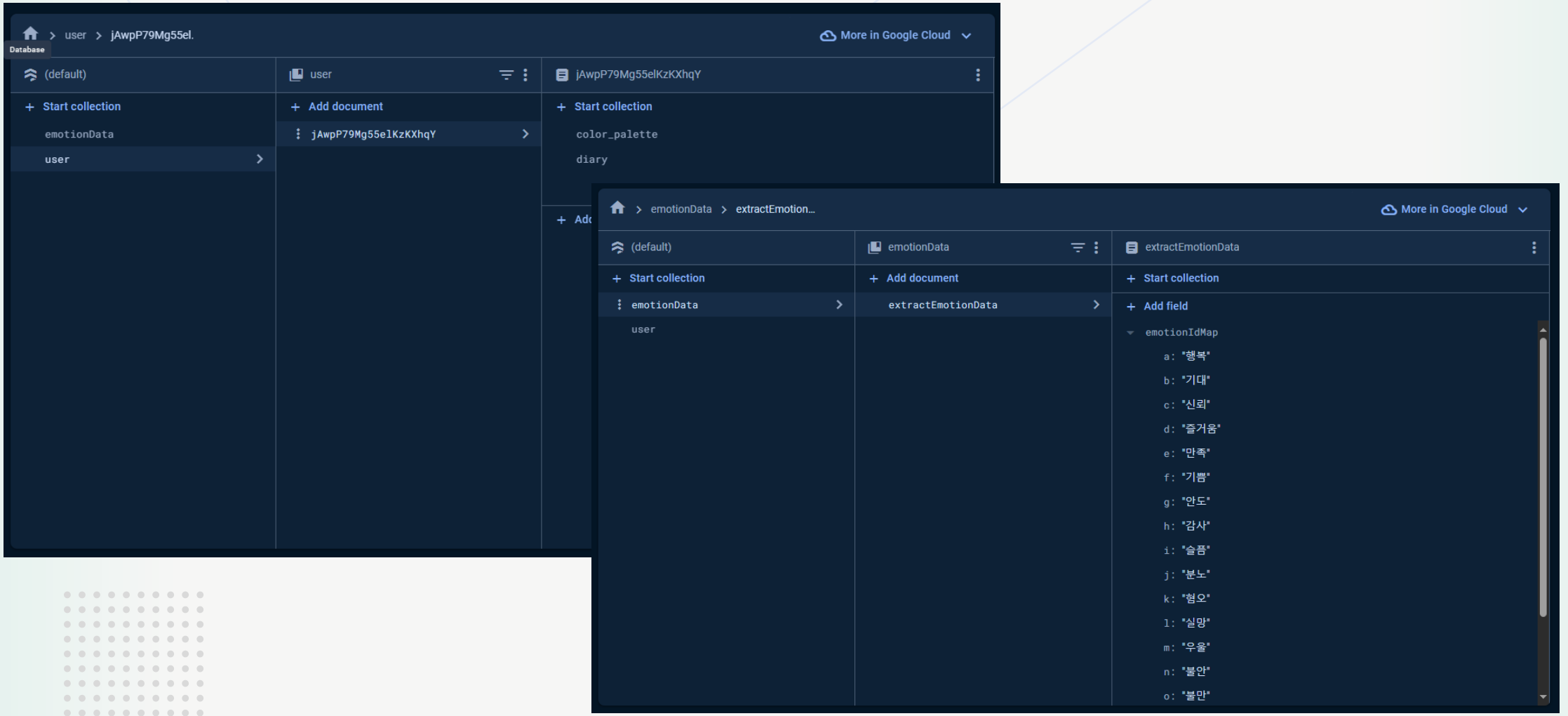


Implementation - Backend

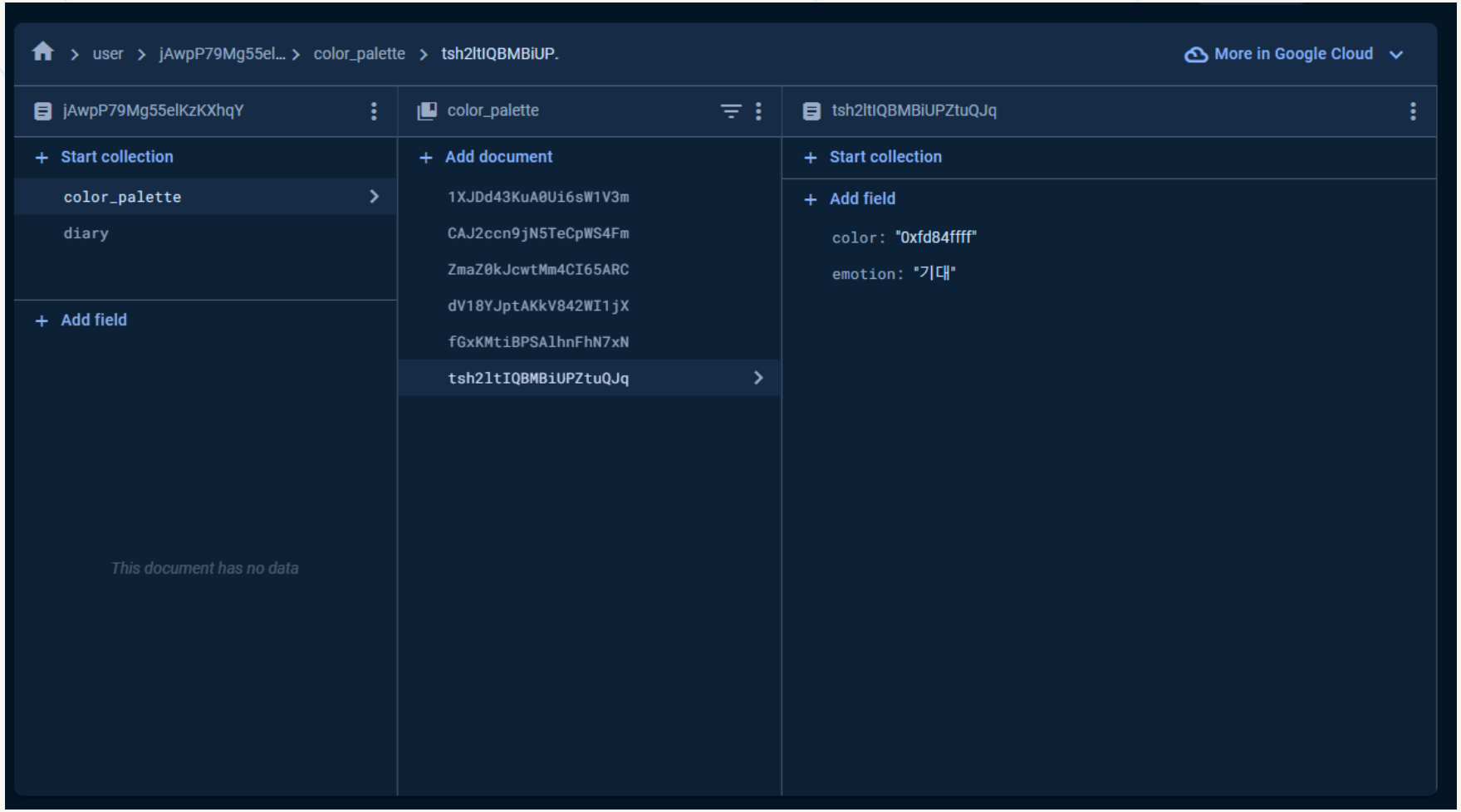
User Write Diary → Send Prompt and User's Diary to GPT → Get GPT's Response → Suggest Emotions



Implementation - Backend

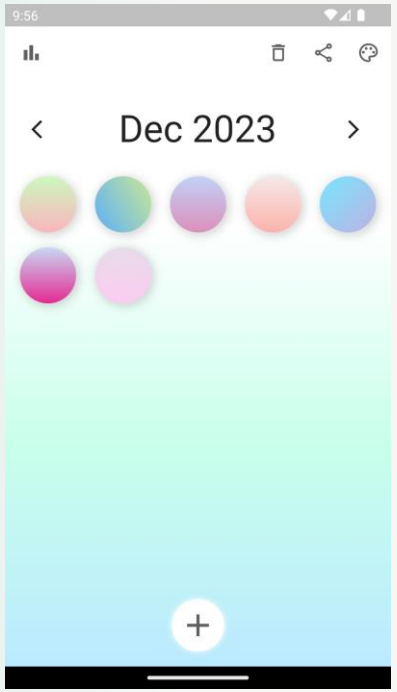


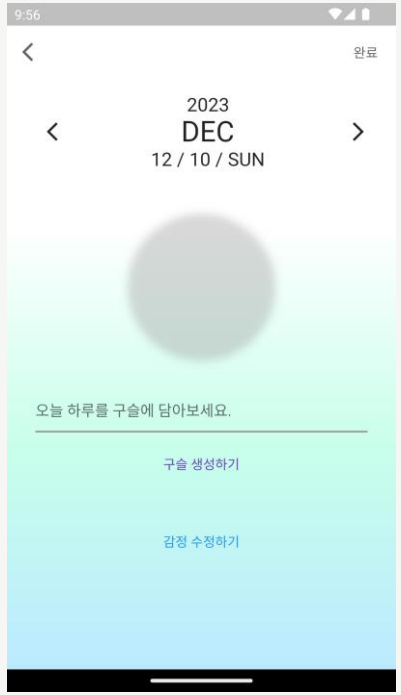
Implementation - Backend



Final Design - Frontend

Display Extracted Emotions → User can add New emotions → Making Beads → Add new beads to the calander





DEMO

Challenges

Flutter Problems

- Hard to learn Dart, Flutter
- Design Issues
- Absence of Official Packages
- Context Delivery Problems

Merge & Conflict

- IoS, Android Issues (Emulator, Testing Environment)
- Hard to deal with conflicts

GPT Processing

- Can GPT distinguish who felt the emotion?
- Can GPT distinguish fact-based text?
- Problems that GPT's response does not follow prompt's direction

Challenges

Flutter Problems

- Hard to learn Dart, Flutter
- Absence of Official Packages
- Our design has unique design so we should make our codes one by one
- Deliver Context made by each pages is hard

Merge & Conflict

- Change of build files when checkout to another branch
- Emulator does not works when build file changes so we should check our environment all the times
- Conflict occurs when merge branches

Challenges

GPT

- Can GPT distinguish who felt the emotion?
- Can GPT distinguish fact-based text?
- Problems that GPT's response does not follow prompt's direction

Prompt 1 (Baseline)

Extract feelings from the text.
Choose three emotions from the list.
List : [happy, … , sad , ….]

Prompt 2

Add Few Examples to the prompt
& Fix Format of the Result

Prompt 3

Change question to multiple-choice type

Challenges – Prompt 2

Add Examples

[Examples]

Q: I woke up early, but I arrived school late because of the traffic jam. It was raining today but I didn't bring an umbrella, so I was sad. I'm glad it's the weekend tomorrow though.

A: Annoying, Sad, Expectation

Add 'No Emotion' Case

List : [Happiness, Expectation, Trust, Fun, Satisfaction, … , Surprise, No Emotion]

Modify Directions

Please only use the emotions listed above.

Extract only the 3 emotions that you feel the most and let me know why.

Don't use parentheses to express two emotions at once.

Please extract three emotions from the diary that the diary's writer feels, not others.

Challenges – Prompt 3

Sometimes, GPT's answers are off the list

Make Question to Multiple Choice Type

Extract three emotions that are appropriate for the given diary among the emotion keywords that exist in the emotion list.

If it is determined that emotions are not included, such as the fact-listed diary, you should answer 's'. (s can only be used alone)

Please extract three emotions that the person who wrote the diary feels directly from the diary.

Modify Examples

[Examples]
List of Emotions:
a) Happiness
b) Look forward to it
c) Trust ,...., s) No Emotion

Q: I've had a hard time coding since this morning. I'm depressed because the weather is not good, but it's okay because the semester is coming to an end soon.

A: o, m, b

Q. Today is Saturday and its December.

A: s

	Case 1 Does GPT distinguish who felt the emotion?	Case 2 Does GPT answer with feelings on the list?	Case 3 Does GPT can judge fact-based text?
Prompt 1 (Baseline)	0.53	0.4	0.6
Prompt 2	0.73	0.53	0.2
Prompt 3	0.8	0.87	0.6

Final Prompt

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감정 목록:
a) 행복
b) 기대
c) 신뢰
d) 즐거움
e) 만족
f) 기쁨
g) 안도
h) 감사
i) 슬픔
j) 분노
k) 혐오
l) 실망
m) 우울
n) 불안
o) 불만
p) 외로움
q) 공포
r) 놀람
s) 감정없음
- 지금부터 너는 감정 목록에 있는 감정이 내가 제공하는 텍스트에서 판단되는지 대답할거야.
- 사실을 나열한 일기와 같이 감정이 포함되어있지 않다고 판단되면 's'라고 대답해야해. s는 단독으로만 사용가능해
- 주어진 일기에서 일기를 쓴 사람이 크게 느낀 2가지의 감정을 추출해줘.
- 감정목록 내부에 존재하는 감정 키워드 중에서 주어진 일기에 알맞은 감정 2개를 객관식으로, a~s중 2개를 선택해 답변해줘.
- 답변은 아래 예시를 꼭 따라서 예시처럼 대답해줘.

[예시]
Q: 오늘 아침부터 코딩하느라 힘들었다. 날씨도 좋지 않아서 우울하지만 곧 종강이니까 괜찮아.
A: o, m, b

Q: 오늘은 토요일이다. 그리고 12월이다.
A: s
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Limitations

Cannot text sharing function at IoS

- IoS does not provide App Store to install another app in virtual machine.

Fail to make Counseling Function

- It takes lots of time to resolve conflict

Detailed diary function is not implemented

- Calender function does not work perfectly
- Absence of photo diaries

Evaluation

- Enhance usability to help choose emotions by using GPT
- Users can select various emotions for a day.

- Android and IoS cross platform
- Sharing Function fits to MZ generation

- Trying various prompts, we can solve problems
- High

Q & A